

GENERAL NOTES

THE GENUS *CHLOROSTRYMON* AND A NEW SUBSPECIES OF *C. SIMAETHIS*

In 1961 Harry Clench (*in* Ehrlich & Ehrlich, How to know the butterflies, Dubuque, Iowa, 262 p.) erected a new genus *Chlorostrymon* and selected as type species *Thecla telea* Hewitson. His description of the genus was very brief. Current authors consider this a valid genus and I feel that the generic description should be elaborated upon to provide a more definitive picture of the taxa contained therein.

Genus *Chlorostrymon* Clench, 1961

Type species: *Thecla telea* Hewitson, 1868.

Description. **Hindwing** tailed, usually two, the shorter (at times rudimentary or missing) at the end of Cu_1 , the second always present at the end of Cu_2 . **Upper wing** surfaces iridescent lavender-blue in the male, brown with pale blue scaling at the wing bases in the female; the underside of the wings, green. **Eyes** densely covered with short, pale bristles; **palpi** short, scaled, porrect, terminal segment short. The **antennae** one-half the length of the forewing costa, the club formed rather abruptly, the nudum completely bare only on the 3 terminal segments.

Genitalia. **Male genitalia** with a wide, short saccus, the valvae completely separate throughout, the aedeagus complex, relatively stout, inordinately large with a ventral keel and with the terminal one-quarter clearly separated from the main shaft, but attached by a narrow transparent membrane and a heavy, long sharp cornutus which traverses the break. **Female bursa copulatrix** with a funnel-shaped ostium bursae, the dorsal plate lightly sclerotized, convex, centrally divided, the ventral portion a short membranous pouch; the ductus bursae relatively long, chitinous, the terminal one-quarter sharply bent dorsally 90°, the cervix bursae a fan-shaped opening into the corpus bursae with a pair of small, dark, sclerotized, rough-surfaced pads located dorsad to the entry of the ductus seminalis. The corpus bursae longer than the complete bursae copulatrix and with two small, simple, blunt, tooth-like signa.

Remarks. The species currently recognized as belonging to *Chlorostrymon* are *telea* (Hewitson), *maesites* (Herrich-Schaffer) and *simaethis* (Drury). Each has been discussed and well illustrated in recent publications, e.g., Klots (1951, A field guide to the butterflies, Boston, 349 p.), Barcant (1970, Butterflies of Trinidad and Tobago, London, 314 p.), Lewis (1974, Butterflies of the world, Chicago, 312 p.), Riley (1975, A field



FIG. 1. **A**, *Chlorostrymon simaethis rosario* Nicolay, Holotype ♂, La Kenedy, Pichincha, Ecuador (2800 m), May 1969 (Rosario Lafebre); **B**, underside of **A**.

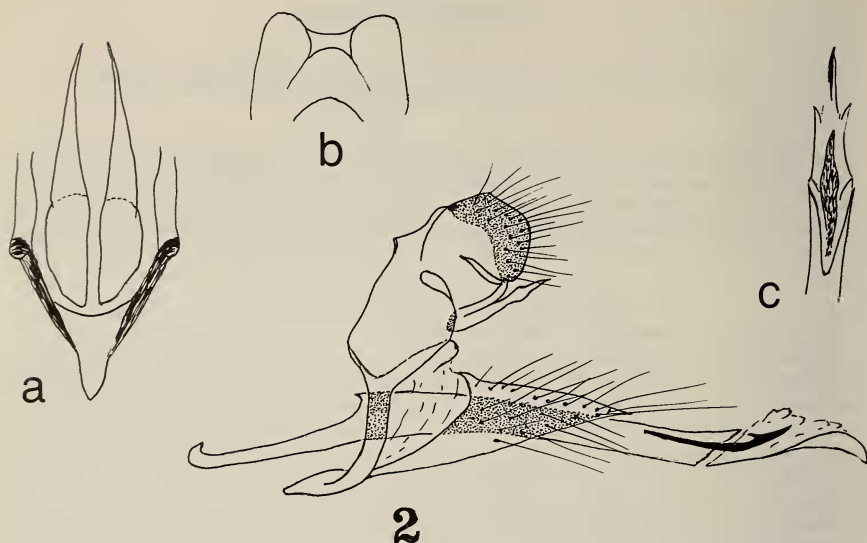


FIG. 2. Male genitalia of *C. simaethis rosario* Nicolay, lateral view with aedeagus in place; **a**, ventral view of saccus with valve in place; **b**, dorsal view of uncus; **c**, ventral view of aedeagus termen.

guide to the butterflies of the West Indies, Collins, London, 224 p.), Thorne (1975, *in* Howe, *The butterflies of North America*, New York, 633 p.). To further document individual taxa here would serve no useful purpose. They are all essentially tropical and are found widely distributed throughout both North and South America. A number of subspecies have been described and recent collecting in Ecuador has revealed a new subspecies of *C. simaethis*, described below.

***Chlorostymon simaethis rosario* Nicolay, new subspecies**

Figs. 1A, 1B, 2, 3

Description. Male: Length of forewing, 11 mm. **Upperside:** forewing violet-blue in the discal area, with wide, darker costal, apical and outer wing borders, the colors blending smoothly without a sharp line of demarcation. **Hindwing** the same violet-blue, but more intense, the dark borders somewhat narrower. Anal lobe spot reddish-brown tipped in black. Fringes on hindwing noticeably pale. A short, spike-like tail at Cu_2 and a rudimentary spur at Cu_1 . **Underside:** forewing yellow-green along a wide band from the base along the costal margin including the apex to Cu_2 ; below this to the inner margin, pale grey. A straight, narrow silvery-white macular postmedian line extends from the costal margin to Cu_1 , the line narrowly edged on both sides by pale brown scales. **Hindwing** green with a straight, narrow silvery-white macular line of spots, bisecting the very center of the wing disc from the costal margin to vein 2A where it turns sharply to the inner margin. A narrow marginal band of soft, pale grey-brown begins at the wing apex and broadens to its widest expanse and terminus at vein 2A. Small patches of silvery scales are dusted along the inner edge of this outer marginal band, along with small scattered spots of dark brown scales, the heaviest concentration at interspace 2A. The anal lobe spot is brown. **Abdominal, thoracic, palpi and leg scales** on the underside grey-white. Antennae checked black and white, the relatively heavy club of 13 segments sharply delineated.

Female. Expanse of forewing, 11 mm. **Upperside** pale brown with sparse pale



FIG. 3. Female genitalia of *C. simaethis rosario* Nicolay, ventral view; a, lateral view.

blue scaling confined to the base of both fore- and hindwings. **Underside** yellow-green as in the male, the white postdiscal line of the forewing, narrow, curved slightly basad. The postdiscal white line of the hindwing narrow, straight from the costa to below the cell where it turns slightly basad, then straight again to vein 2A, then sharply angled to the inner margin. The outer marginal grey band as in the male.

Types. Holotype ♂, La Kenedy, Pichincha, Ecuador (2800 m) May 1969, collector, Rosario Lafebre. Paratypes include 11 ♂ from the type locality with dates in December 1968. The Allotype, a very worn ♀ from San Bartolo, March 1969 (2800 m), collector, Rosario Lafebre. The Holotype ♂ and Allotype ♀ with 10 ♂ Paratypes are located in the Allyn Museum of Entomology, Sarasota, Florida. A single ♂ paratype is in the author's collection.

Etymology. It is a pleasure to name this interesting subspecies after Rosario Lafebre of Quito, Ecuador, a friend and an ardent butterfly collector for many years.

Remarks. The number of named subspecies of *Chlorostrymon simaethis* now is four. When specimens are viewed from above, it is difficult to make a positive identification of any subspecies. All are essentially identical, with the possible exception of size, which may or may not be associated with different localities. Subspecific differences from the nominate *simaethis* are located on the underside of the wings, and concern primarily the differences in the discal lines. Typical *simaethis* has the post-discal of the forewing bending inward, and that of the hindwing uneven throughout its entire length. The subspecies *sarita* Skinner (1895, Ent. News, 6: 112, Philadelphia) has the postdiscal of the forewing somewhat straighter, and that of the hindwing curved slightly basad with an obvious "bulge" outward at about the midpoint of the wing. The subspecies *jago* Comstock & Huntington (1943, Lycaenidae of the Antilles, Ann. New York Acad. Sci. p. 49-130) appears to be a minor variation of typical *simaethis*; it is considerably larger and the narrow, uneven maculation of the underside is thus magnified. *C. simaethis rosario* follows this varietal pattern on the underside; the discal line is very straight, very narrow without any 'bulge' and the marginal grey band is rather narrow. As a result, the wing has a greater expanse of green color between the discal band and the marginal band.

The Allyn Museum collection contains series of *simaethis* and its subspecies from various tropical localities in the hemisphere. Careful scrutiny of the undersides of any series from a single locality reveals an extraordinarily variable insect. The subspecies *sarita*, found throughout Central and South America from Mexico to Argentina, is the most variable of all. This variability is found within series from any particular locality, and is not correlated with geography.

S. S. NICOLAY¹, 1500 Wakefield Drive, Virginia Beach, Virginia 23455.

¹ Research Associate, Allyn Museum of Entomology, 3701 Bay Shore Road, Sarasota, Florida 33580.

OVIPOSITION BEHAVIOR OF REARED *ANTHERAEA POLYPHEMUS* (SATURNIIDAE)

To improve efficiency in the collection of eggs, we studied oviposition behavior in the giant silkworm moth species we rear. We reported information for *Callosamia promethea* (Drury) (Miller & Cooper 1977, J. Lepid. Soc. 31: 282-283) and *Hyalophora gloveri gloveri* (Strecker) (Miller 1978, J. Lepid. Soc. 32: 233-234). Taschenberg & Roelofs (1970, Ann. Entomol. Soc. Amer. 63: 107-111) have reported information for *Hyalophora cecropia* (Linnaeus). This paper reports oviposition data for a colony of *Antheraea polyphemus* (Cramer) maintained on various maples (*Acer* spp.) in Frederick Co., Maryland.

The adults moths in the colony typically emerged in the late afternoon or early evening (1600-1900 hours). If male moths were in the colony, they were placed with the females in indoor mating cages; if males were not available, we placed the females in outdoor mating cages (Miller & Cooper 1976, J. Lepid. Soc. 30: 95-104) to attract wild males for copulation. Only females that mated on the night of or following emergence were included in this study. Mating pairs were observed at frequent intervals